

FIGURES AND SEQUENCES (600-1-284P)

(locations of polymorphisms or sites of polymorphisms appear in bold underline)

FIGURE 1 AND SEQ ID NO:1

Wild-type gene

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-177 CTGCCGGCTC ACTCGGCTGC TGCCTCTGGT CTGGCGTCTG CTGAGAAGAT CCTCTTCTAC
-117 CCTGCTCTGC ACCTGTGCTC GACTGCCAGC CGGCTGAGGG CGGGGGTCTC CACGGTGGTC
-57 CCAGCTCCCA AGGAGGTTGC AGAA

      1                               gtaagg gcctgagccg ctggaggctg ggtgggggtc      IVS I
37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtccca
97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcgt gtgcgtgagg gcaggtttgg
157 gcatttctgt gtgtctgtgt gtgtgacttg tgcctctgca tcctgtgccc tgtgaacacg
217 cgagtggctg tgtgttcata agtcctgtg ggtggacacg tgcctggggg ttagctgccc
277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtccctgtgt ctccatgtgt
397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctcagtgtct
457 ctccgctggg cgtgtgtctg gactgtcagc cacttgtctc tgcgtctgtg cccag

-33                               GTACCG TACAGAGTGG ATTTCAGGG CAGTGGCATG      ATG Start
      4 GAGCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

      1                               gtca gtggggtgtc      IVS III
15 cctctctccc ctcaccaggc tccctggctc ccgggtgget cctctgggcc cagtgccct
65 ccacgtctcc tgggcccact ctgaccccggt ttctctccct gcag

590                               AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCAAGGGGCT GGGGGTTTCA CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCTCT CTACGCCCTC

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1 964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
2 1024 GACGTGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
3 1084 ACCTCTGAGA CGGTACCGCG GCCCGCAT**TGA** CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
4 1144 AGCCCGCAGA GCCCATCTAC GCCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
5 1204 GACACACCTT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
6 1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
7 1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
8 1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
9 1444 CCTCCCCGTG CTTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCCTGGGT
10 1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCCA TGTGCTGTGT
11 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
12 1624 GGACAGGCTT GGCACGGCCC GGGAAAGTGA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
13 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
14 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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16
17
18 Intron sequences (IVS I and IVS III) are shown in small case letters. Numbering for each IVS
19 begins with +1 for the first base of the intron; numbering is specific for each intron. mRNA
20 sequence is shown in capital letters. +1 is assigned to the first base of the initiation
21 codon. Nucleotides upstream (5') from the initiation codon are assigned negative numbers. The
22 ATG initiation codon and TGA stop codon are shown in bold. Locations of identified SNPs are
23 also shown in bold and underlined.

24
25
26 FIGURE 2 AND SEQ ID NO:2
27 Wild-type Intron I (IVS I)

28
29
30 1 gtaagg gectgagccg ctggaggteg ggtgggggtc
31 37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtocca
32 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcgt gtgcgtgagg gcaggtttgg
33 157 gcatttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
34 217 cgagtggctg tgtgttcacg agtccctgtg ggtgagacacg tgtcctgggg ttagctgtcc
35 277 tccaggcacc ctgtgtgtga gtctcctaac caaatgggac cgtgtccttg cgggtgcatg
36 337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtcctcgtgt ctccatgtgt
37 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gccctgtgac ctgagtgctc
38 457 ctccgctggg cgtgtgtctg gcaactgcag cacttgtctc tgcgtctgtt ccag

39
40 FIGURE 3 AND SEQ ID NO:3
41 G-46A polymorphism in 5'-untranslated region

-177 CTGCCGGCTC ACTCGGCTGC TGGCTCTGGT CTGGCGTCTG CTGAGAAGAT CCTCTTCTAC
 -117 CCTGCTCTGC ACCTGTGCTC GACTGCCAGC CGGCTGAGGG CGGGGGTCTC CACGGTGGTC
 -57 CCAGCTCCCA AAGAGGTTGC AGAA

FIGURE 4 AND SEQ ID NO:4

GIVS I 135C polymorphism in intron I

1 gtaagg gcctgagccg ctggaggctg ggtgggggtc
 37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtccca
 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcct gtgcgtgagg gcaggtttgg
 157 gcatttctgt gtgtctgtgt gtgtgacttg tgcctctgca tccctgtgcc tgtgaacacg
 217 cgagtggctg tgtgttcata agtcctgtg ggtggacacg tgcctgggg ttagctgcc
 277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
 337 tgtgtctttg tgttctgtga gtcctgtct gtgcacacgt gtcctcgtgt ctccatgtgt
 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctcagtgtct
 457 ctccgctggg cgtgtgtctg gcactgcagc cacttgtctc tgcgctctgt cccag

FIGURE 5 AND SEQ ID NO:5

GIVS I 250A polymorphism in intron I

1 gtaagg gcctgagccg ctggaggctg ggtgggggtc
 37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtccca
 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcct gtgcgtgagg gcaggtttgg
 157 gcatttctgt gtgtctgtgt gtgtgacttg tgcctctgca tccctgtgcc tgtgaacacg
 217 cgagtggctg tgtgttcata agtcctgtg ggtggacacg tgcctgggg ttagctgcc
 277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
 337 tgtgtctttg tgttctgtga gtcctgtct gtgcacacgt gtcctcgtgt ctccatgtgt
 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctcagtgtct
 457 ctccgctggg cgtgtgtctg gcactgcagc cacttgtctc tgcgctctgt cccag

FIGURE 6 AND SEQ ID NO:6

GIVS I 251A polymorphism in intron I

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1          gtaagg gcctgagccg ctggagggtcg ggtggggggtc
37 ctgctgacag actgcagcaa agcagggcggtg gtggagggggg caggaggaag ctgggtccca
97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcgt gtgcgtgagg gcaggtttgg
157 gcattttctg gtgtctgtgt gtgtgacttg tgcctctgca tccctgtgcc tgtgaacacg
217 cgagtggctg tgtgttcctc agtccctgtg ggtgaacacg tgcctggggg tgtagctgcc
277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtccctcgtg ctccatgtgt
397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctcagtgtct
457 ctccgctggg cgtgtgtctg gactgtcagc cacttgtctc tgcgtctctg cccag

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FIGURE 7 AND SEQ ID NO:7

C510T polymorphism in coding region

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-33          GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG ATG Start
4  GAGCCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCTT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTAAAT GTGGCCATCT GGGCCCTGGC CTCGTGTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

590          AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCGGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGTTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCCTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GACGTGACAG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCGCGCATGA CTAGGCGTGG ACCTGCCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCCCATCTAC GCGCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCCTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA

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1 1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
 2 1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
 3 1444 CCTCCCCGTG CTTTATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCCCTGGGT
 4 1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
 5 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
 6 1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
 7 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCTGTTC CGACTCCACC TGTGCAGCCG
 8 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 8 AND SEQ ID NO:8

CIVS III 67T polymorphism in intron III

-33 GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG **ATG Start**
 4 GAGCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
 64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
 124 CACGGCGCCT TCCTGCCCTT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
 184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
 244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
 304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
 364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCTA
 424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
 484 CGCACGTCCA GCAAAGCCCA GGCTGTAAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
 544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

 1 gtca gtggggtgtc **IVS III**
 15 cctcctctccc ctcaccaggc tccctggctc cggggtggct cctctgggcc ca~~g~~gtgacct
 65 ccacgtctcc tgggcccact ctgaccccggt ttctctccct gcag

 590 AGAT CGAGTGCCTG
 604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
 664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
 724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
 784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCAGGTC
 844 TTCGTGCTGG CCAAGGGCT GGGGGTTTCA CCGAGCAGCG AGACTGCCGT GGCCATTCTG
 904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
 964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
 1024 GAC~~G~~TGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
 1084 ACCTCTGAGA CGGTACCGCG GCCCGCATGA CTAGGCGTGG AC~~C~~TGCCCAT GGTGCCTGTC
 1144 AGCCCGCAGA GCCCATCTAC GCCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
 1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCCTG TGGCCAGGG
 1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA

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1      1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
2      1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
3      1444 CCTCCCCGTG CTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
4      1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
5      1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
6      1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
7      1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCTGTTC CCACTCCACC TGTGCAGCCG
8      1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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FIGURE 9 AND SEQ ID NO:9
A804G polymorphism in coding region

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-33          GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG ATG Start
  4 GAGCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
 64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTCGGAG GGCTCTTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCC
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

590          AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCCGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT GGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCCATCCT CTACGCCTTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GACGTGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCCCCGATGA CTAGGCGTGG ACTGCCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCCCATCTAC GCCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCTT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
1444 CCTCCCCGTG CTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT

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1 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
2 1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
3 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
4 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 10 AND SEQ ID NO:10
C1026T polymorphism in coding region

-33 GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG **ATG Start**
4 GAGCCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGCGCCTT TCCTGCCCTT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG
590 AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCCATCCT CTACGCCTTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GATGTGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCCCGCATGA CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCCCATCTAC GCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCTC
1444 CCTCCCCGTG CTTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 11 AND SEQ ID NO:11

C1126G polymorphism in 3'-untranslated region

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-33          GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG   ATG Start
4   4   GAGCCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
6   64  CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
7   124 CACGGCGCCT TCCTGCCCTT CCGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
8   184 TGTGTCGGAG GGCTCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
9   244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
10  304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
11  364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
12  424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
13  484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
14  544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

590          AGAT CGAGTGCCTG
16  604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
17  664 TTCTCCTTCA TCGTCCCGCT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
18  724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
19  784 ACTCGGCTGG TGCTGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
20  844 TTCGTGCTGG CCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
21  904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
22  964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
23  1024 GACGTGCAGG TGTCTGACCG CGTGCAGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
24  1084 ACCTCTGAGA CGGTACCGCG GCCCGCATGA CTAGGCGTGG ACGTGCCAT GGTGCCTGTC
25  1144 AGCCCGCAGA GCCCATCTAC GCCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
26  1204 GACACACCTT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTCCCTG TGGGCCAGGG
27  1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
28  1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
29  1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCTC
30  1444 CCTCCCCGTG CTTTATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
31  1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
32  1564 GCTGTTTGCA TGGCAGGGCT CCAGTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
33  1624 GGACAGGCTT GGCACGGCCC GGGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
34  1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
35  1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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